Q And no fax was sent from the Bergen County Emergency Office to WJUX authorizing use of the microwave?

A Absolutely no.

MR. HELMICK: Thank you.

JUDGE STEINBERG: Mr. Aronowitz?

RECROSS-EXAMINATION

BY MR. ARONOWITZ;

Q Mr. Turro, you said you disconnected the strobe light because it was malfunctioning?

A Yes, sir.

Q Could you give us an example of its malfunction?

A I don't have a 56 kilobyte circuit here to do that, but what I do have for you, Mr. Aronowitz, and what Mr. Naftalin has filed is letters from the manufacturer of that particular unit stating that such problem does exist and does occur randomly over long periods of time.

Q So that the strobe light would randomly go off; is that correct?

A Exactly.

Q Okay. So that the strobe light, and I'm not even ceratin what Mr. Naftalin asked, but I think Mr. Naftalin was trying to ask were there situations that in a malfunction the light -- were there --

MR. ARONOWITZ: Nobody asked, and this is part of the problem, Your Honor.

JUDGE STEINBERG: Okay, what Mr. Naftalin asked was basically, and I'm paraphrasing, was you had on the 56 kb circuit from Dumont for the TC-8, connecting the TC-8 from Dumont and Monticello. Part of that circuit was remote control data, and I think what Mr. Naftalin asked was did there have to be a problem in the data circuit, the data portion of the circuit before the strobe light would flash.

And the answer was yes.

MR. ARONOWITZ: Okay.

BY MR. ARONOWITZ;

Q And I believe I asked earlier if in its malfunctioning were there occasions when the strobe light would go off without any impairment --

JUDGE STEINBERG: Without --

BY MR. ARONOWITZ;

Q -- of the 56 kb circuit, and I believe the answer was yes; is that correct? Wasn't that part of the malfunctioning?

A I'm sorry. I don't understand the question.

Q Let me ask you -- let me ask what I think I asked in the first place --

A Okay.

Q -- because I am so confused.

JUDGE STEINBERG: Well, I can understand it because I thought that -- I had the same -- it appears to me

to be a conflict in the record because when you were questioning, what I remember hearing was that there did not have to be a problem in the data circuit before the strobe light went off. The strobe light could go off all by itself on its own.

MR. ARONOWITZ: And that was, in fact, a malfunction.

JUDGE STEINBERG: Well, you have --

BY MR. ARONOWITZ;

Q All right, it could go off on its own, and did that cause you --

JUDGE STEINBERG: Wait, that's what I thought I heard.

MR. ARONOWITZ: That's what I thought I heard.

JUDGE STEINBERG: Okay. So let me as Mr. Turro. So you heard it and I heard it, so that we are both not crazy.

MR. ARONOWITZ: That's helpful. That's why I asked.

JUDGE STEINBERG: That should put you -- give you a little bit of calming effect.

The way I thought I heard it was that the strobe light could go off -- I don't want to use the word "randomly," -- but at times when there was no problem with the telemetry.

Did you mean to say that -- yes, if you did say it, and only the transcript could tell us that, did you mean to say it that way?

THE WITNESS: Even I'm getting confused now.

The only time that the light would -- I'm sorry. I'm sorry.

JUDGE STEINBERG: That's okay. You talk to either one of us.

THE WITNESS: The only time that the -- the way that this was wired and configured, Your Honor, is only when you lost that green part there that says "remote control data to WJUX" on Chart 1. When you lost that green piece, the light would flash.

BY MR. ARONOWITZ;

Q That's the way it was supposed to work?

A Yes.

Q But it did not work that way?

A Yes. I think I'm -- only when you lost this little tiny data channel did the light flash. What Turro thought when he installed the system was that it would indicate failure of the entire system, and Turro was wrong.

What happens on the small channel --

JUDGE STEINBERG: Let's go off the record for a minute.

(Whereupon, a recess was taken.)

JUDGE STEINBERG: We're back on the record.

And, Mr. Aronowitz, if you want to continue.

BY MR. ARONOWITZ;

Q Mr. Turro, with respect to the equipment we have here as installed, the strobe light will do what? When you installed the strobe light, did it ever go off when there was no problem with the set up?

JUDGE STEINBERG: With the 56 kb circuit.

BY MR. ARONOWITZ;

Q Did the light ever go off when there was no problem with the 55 kb circuit?

A No.

Q I believe earlier you said yes, it did, and that was one of the reasons you got rid of it.

A What I said was --

Q Is that correct?

A I'll tell you what I said because I know exactly what I said.

Q Okay.

A I said when you lose this part of the circuit --

JUDGE STEINBERG: That's the data part of the circuit.

THE WITNESS: The data part of the circuit, the light would flash, and that happening didn't mean that you lost program audio. That's what I said.

BY MR. ARONOWITZ;

Q And that assumes that everything is working correctly; is that correct?

A Yes.

Q Okay. But you said the strobe light didn't work correctly.

A Oh, oh, okay. Here's what -- what I was saying was this. When I installed the strobe light, I thought that it indicated a massive failure of the system. I was wrong. It only indicated this data channel going back, the small one, the data one; not the program one. And apparently that is a common problem with these units.

So Turro thought, oh, this meant we're off the air, that we log program. It was wrong. It was an incorrect indication because of this small circuit crashing sporadically and randomly, and often.

JUDGE STEINBERG: Okay, and by "this small circuit," you meant the data circuit?

THE WITNESS: The remote control data to WJUX, yes.

JUDGE STEINBERG: Okay. Now, to the extent that your testimony earlier today was different, do you stand by the testimony you just gave?

THE WITNESS: Yes.

JUDGE STEINBERG: And that if the testimony was

different earlier, then it was wrong earlier?

THE WITNESS: Yes.

JUDGE STEINBERG: But this is the --

THE WITNESS: This is it.

JUDGE STEINBERG: This is the way the system worked --

THE WITNESS: Yes.

JUDGE STEINBERG: -- as installed?

THE WITNESS: Yes.

BY MR. ARONOWITZ;

Q I don't mean to belabor this, all right. I don't have an understanding. I don't have an understanding.

You said eventually you disconnected the strobe because it wasn't working properly.

A There was random -- it would flash incorrectly.

Q Randomly?

A Randomly.

Q So it could flash and there would be no problem with this set up?

JUDGE STEINBERG: When you say "this set up," you're talking about the 56 kb circuit.

MR. ARONOWITZ: The set up on Chart 1.

BY MR. ARONOWITZ;

Q There could be no problem in the audio circuit --

A Audio circuit.

Q -- audio remote control circuit --

JUDGE STEINBERG: No, Mr. Turro is shaking his head no. Let me see if I can summarize, and I think the source of Mr. Aronowitz's confusion is you're not separating the audio part of the circuit from the data part of the circuit.

It would flash, is this correct, only when there was a problem in the data part of the circuit?

THE WITNESS: Yes.

JUDGE STEINBERG: And it would -- and that's the only circumstance under which it would flash?

THE WITNESS: Yes.

JUDGE STEINBERG: So if that light flashed, there was a problem in the data circuit?

THE WITNESS: Yes.

JUDGE STEINBERG: If the light did not flash, there was no problem in the data circuit?

THE WITNESS: Yes.

JUDGE STEINBERG: The light had nothing -- the light had no function -- it did nothing to indicate that anything -- let me start again.

The light had nothing to do with anything going on over the audio part of the circuit?

THE WITNESS: Correct.

BY MR. ARONOWITZ;

Q So when you say that it went off randomly, what do you mean?

JUDGE STEINBERG: Well, I think he just explained it.

MR. ARONOWITZ: I don't -- I mean, randomly. I mean, it --

THE WITNESS: Randomly this circuit would crash.

JUDGE STEINBERG: The data circuit.

THE WITNESS: The green one. The remote control data to WJUX, this small little piece, not this.

MR. ARONOWITZ: Okay.

THE WITNESS: The small little piece would lose its ability to generate, pass data back and forth, and it would cause the light to flash.

JUDGE STEINBERG: And it would -- okay, when Mr. Turro said "not this," he was pointing to the audio part of the circuit.

So basically, what the testimony is -- correct me if I'm wrong -- is problems arose in the data circuit randomly; is that right?

THE WITNESS: Yes, sir.

JUDGE STEINBERG: And that caused the light to flash.

MR. ARONOWITZ: Thank you, Your Honor.

JUDGE STEINBERG: Correct?

THE WITNESS: Yes, sir.

JUDGE STEINBERG: Okay. Are you straightened out now?

MR. ARONOWITZ: I believe I am.

JUDGE STEINBERG: Okay.

MR. ARONOWITZ: I believe I am. We have been tossing too many words around.

JUDGE STEINBERG: Well, however many words it take, it takes.

Mr. Helmick, did you --

MR. HELMICK: No, I just wanted to clarify your statement, Your Honor, that if the light goes off, the question I have of Mr. Turro, if the light goes off in Dumont, it indicates that there is a problem with the data circuit, but it could indicate that there is a problem in the audio circuit as well when both the audio and data are cut.

JUDGE STEINBERG: Right, and I think that -- is that correct?

THE WITNESS: Yes.

JUDGE STEINBERG: Okay, Mr. Riley?

MR. RILEY: I do have a question, Your Honor.

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RECROSS-EXAMINATION

BY MR. RILEY:

Q Mr. Turro, you described two occasions, one on July 6, '95, and one sometime later, I think you said 10 to 12 months, but I'm not sure of that, where there was a phenomenon you described as dead carrier in which audio programming wasn't reaching WJUX FM from Dumont, but the WJUX FM transmitter continued to generate a carrier that didn't have audio modulation on it.

Do you recall that testimony?

A Yes, I do.

Q Your testimony seemed to indicate that fur the duration of those two events WJUX did not resume programming. Is that what you meant to say?

A No. On the second event George Spicka was phoned, I believe, by Mr. Blabey, to go to the WJUX studio and run WJUX music from the WJUX main studio.

Q Okay.

A And it may have been as little as six months. It wasn't long after this.

JUDGE STEINBERG: Okay, it wasn't long after the July '95 incident?

THE WITNESS: No, it may have been a short as six months. I don't recall the exactly time.

MR. RILEY: That's the only question I had, Your

Honor.

JUDGE STEINBERG: Okay, let's take a recess, and set up -- and we will set up the next set up and we will go back on the record when that's ready to be -- when we are ready to do the next set up.

So we will go off the record.

(Whereupon, a recess was taken.)

JUDGE STEINBERG: Let's go back on the record, please. Okay, we are on the record, and what we have done is we have set up a different configuration, and why doesn't Mr. Naftalin go through that with the witness.

DIRECT EXAMINATION

BY MR. NAFTALIN:

Q Okay,

MR. NAFTALIN: Okay, Mr. Turro, similarly, as we did for the previous arrangement of equipment to demonstrate the functions for the Monticello transmitter, is it true have you now rearranged the equipment and their functions to make a demonstration of how the Dumont studio was able to control the Fort Lee translator?

A Yes.

Q Okay. You still have the same two pieces of TC-8 remote control?

A That is correct.

Q And you still have the same -- what was this

called, the top unit?

A Interface.

Q You still have the same interface?

A Yes.

Q You have, however, changed the red light?

A Yes.

Q Okay, let's walk through it very quickly.

The TC-8 unit which remained labeled as "In Dumont," does that represent the TC-8 unit residing in the Dumont studio used to control the Fort Lee translator?

A Yes.

Q Okay.

JUDGE STEINBERG: Yes, but that would be a second TC-8 unit --

THE WITNESS: Separate.

JUDGE STEINBERG: -- at Dumont studio. Separate from the one we were talking about earlier?

THE WITNESS: Yes.

BY MR. NAFTALIN:

Q So while that, while the unit now labeled "In Dumont" is the same model of unit that you use to control Monticello, correct?

A I'm sorry? It's the same -- go ahead.

Q You had identical models of TC-8 unit to control Fort Lee and to control Monticello?

A Yes.

Q Okay. We are now looking at the TC-8 unit labeled "In Dumont" represents the TC-8 unit that would control the Fort Lee translator?

A Yes.

Q Okay, now, it would have -- it would show different indications through its status lights one through eight?

A Yes.

Q Different from the Monticello transmitter is what I mean.

A Most definitely.

Q Okay. And the channels that you would scroll through and use for the TC-8 unit connected to the Fort Lee translator would also be different than what you would see for channels for the Monticello unit?

A Yes.

Q Okay. Similarly, the piece of the TC-8 system which would have resided at the Fort Lee translator would also have had different functions from the unit that would have resided at the Monticello transmitter?

A Yes.

Q Okay. Please tell us, here next to them you have taken away the cigarette box sized black unit with a red light and you have replaced it with just a single red light

without the black box, which is resting on a book so it's a little more visible. And underneath it you have a sign that says, "Loss of data on the microwave - WMG499."

Would you explain what this new red light is supposed to do?

A The red light will indicate when the Fort Lee TC-8 remote control unit has lost data from Dumont.

Q Okay.

MR. NAFTALIN: Your Honor, with your permission --

MR. ARONOWITZ: Excuse me.

MR. NAFTALIN: Sure.

MR. ARONOWITZ: When you say "loss of data from Dumont," do you mean link 56 kb line?

THE WITNESS: I'm going to get to that.

MR. ARONOWITZ: Or some combination?

MR. NAFTALIN: I think Mr. Turro is -- Mr. Turro is going to get to this.

MR. ARONOWITZ: Okay.

JUDGE STEINBERG: Yes, this is totally different.

MR. NAFTALIN: We have a completely different arrangement.

MR. ARONOWITZ: All right.

BY MR. NAFTALIN:

Q Mr. Turro, there is a different arrangement for the transmission of -- okay, let's first of all talk about

the period of time, let's be careful about this, the period of time from late October of 1994 up until the microwave station, WMG49, was deactivated.

Was that approximately early July of 1995?

A I believe so.

Q Give or take a few days one way or the other?

A Yes.

Q Okay. We are now looking at a configuration of TC-8 units and the red light. The demonstration you have here would represent the way remote control of the Fort Lee translator was accomplished from Dumont from late October 1994 up until deactivation of the microwave station?

A Correct.

Q Okay. And during that period of time is it correct that you were using the microwave path to carry the data, the telemetry, between the two pieces of the TC-8 units?

A Yes.

MR. NAFTALIN: Your Honor, with that in mind, may Mr. Turro proceed to his chart and give a general description of the arrangement before he goes to the equipment itself?

JUDGE STEINBERG: Yes.

MR. NAFTALIN: Okay.

THE WITNESS: Okay.

BY MR. NAFTALIN:

Q Mr. Turro, you have personally drawn what is labeled Chart No. 2; is that correct?

A Yes, sir.

Q Okay.

JUDGE STEINBERG: Let me just mark -- Chart No. 2 will be marked for identification, and it's a one-page chart, as Turro Exhibit No. 34.

(The document referred to was marked for identification as Turro Exhibit No. 34.)

JUDGE STEINBERG: And, again, after it's been -- assuming it's received -- well, even if it's not received, everybody needs copies of it. But you can withdraw it and make your little copy of it, and then get it to everybody.

MR. NAFTALIN: Thank you, Your Honor. We will follow the same procedure we discussed before.

JUDGE STEINBERG: Right.

THE WITNESS: Okay, there was a microwave transmitter located in Dumont, New Jersey, which had audio paths to it from the WJUX console -- I'm sorry -- from the Jukebox Radio network console. And also attached to the microwave unit was a TC-8 remote control unit.

The TC-8 remote control unit generated data, similar to the same data that went to Monticello. It

generated data. This data was inserted or multiplexed into the Scala miniflector.

Now, this antenna has been referred to in this proceeding as a 10-foot dish. It was never ever a 10-foot dish used with the microwave.

BY MR. NAFTALIN:

Q Mr. Turro, who referred to it in that way?

A Mr. Gaghan did.

Q Okay.

A There was never ever at any point in time a 10-foot dish used to microwave signal to Fort Lee, or as Mr. Gaghan said, Monticello, New York, ever. And I don't like to say the word "impossible," but it is impossible to microwave from Dumont to Monticello.

Q So what was the size of the microwave antenna that was actually used?

A It really doesn't look like a microwave antenna. It's basically a little grid, and it's approximately 18 inches by approximately three feet.

Q Okay.

A Approximately.

That was mounted on the building next door to the Jukebox Radio network, and it pointed at Fort Lee, and it sent information to Fort Lee. it sent two pieces of information to Fort Lee via two different channels. A big

channel, similar to a 12-lane highway, approximately eight lanes long to send audio, and then half a lane to send data to Fort Lee.

This data was received on the microwave unit and was put -- and was relayed to the TC-8 remote control

Q You say it was received on the microwave unit. Where was it received?

A I'm sorry. The microwave receiver in Fort Lee was on top of the building in Fort Lee. it received the microwave signal, and took the data path and brought it down to the TC-8 remote control.

Q What happened to the audio path?

A The audio path went to a dummy load. It just didn't -- entered anywhere but just -- it went into space.

Q Okay.

A It didn't do anything.

So this data path was used to connect these two TC-8 remote controls together with each other.

And as I understand, and even Mr. LaFollette mentioned it in his testimony, this is a common use of ICRs or microwave units. This is common use.

Q What do you mean by ICR?

A Intercity relays.

Q Okay.

A Mr. LaFollette agreed that this is common use and

it's used for this all the time.

Okay, I take my respon -- okay, so these two TC-8s are talking via this data link we have here, okay? And you can do all sorts of things. Switch audio inputs, switch transmitters. Never ever have you been able to take meter reading to determine the power output of Fort Lee. Never ever have you been able to raise and lower the power of the transmitters in Fort Lee ever using this or any other system that I installed.

Q And by "raise and lower," you mean adjust?

A Exactly. You can't adjust the power on something you can't read. If you can't read power output, how can you adjust power and raise and lower power. It can't be done.

So these TC-8s were used to control main transmitter, auxiliary transmitter. The translator at Fort Lee we have talked over a period of time how unique it is. It was the first translator in the country to have auxiliary antenna system license to it. That's how unique it was.

And when Mr. Hurst submitted application to the FCC for an auxiliary transmitter for the -- I'm sorry -- antenna, they didn't know how to process it because ne one, it's probably the only one like that in the country. So I am just trying to give you an idea of how unique this facility really is.

So these TC-8s are -- this TC-8 is communicating

with this TC-8 via this intercity relay, microwave STL.

Q When you say "this TC-8 is communicating with this TC-8," could you use words for the Court?

A I apologize.

The Dumont TC-8 communicated with the TC-8 remote control in Fort Lee via this data path.

Q And by "this data path," you are referring to?

A The lines in blue.

Q The data path on the microwave?

A Correct.

Q Okay.

A I've lived in Bergen County all my life. I take my responsibility to the community very seriously. In the even that there ever were an emergency or failure of the remote control unit where the buttons stick on it, to this day they still do, and you couldn't make a switch to put Fort Lee on the microwave unit, and there was an emergency, that would be a bad thing.

One day I'm sitting around at home. I said, "Oh, I have a great idea." The TC-8 remote control in Fort Lee has an alarm closure that if it loses telemetry, it closes a switch, and you can do whatever you want with that switch. So I said, "Oh, I have an idea. I'm going to hook that up that if I ever lose data on this microwave that it will force the unit to roll back onto itself for audio."

Q Could you explain what you mean by "roll back"?

A In other words, if I were to take a -- if I were to cut this data path right here on the microwave, if I were to cut this path, it would tell the transmitter -- the translator in Fort Lee to go to the microwave audio as a fail-safe in the event of an emergency.

But did I ever have to use it? No. Did I think I would ever have to use it? I hope not. And that's basically what it did.

What I can do for you is demonstrate what would happen if that data path were interrupted or taken away.

Q Okay, before you get that far, which is a -- that's great, are there questions?

MR. ARONOWITZ: Oh, not yet. I've got questions. I just don't know that this is the time.

JUDGE STEINBERG: On Chart 2, you've got at the bottom of it in red two diagrams that say "18 feet by 36 feet gird." Have we not gone to that yet?

THE WITNESS: Actually, I apologize, Your Honor. It should be 18 inch by 36 inch grid.

JUDGE STEINBERG: Okay. 18 inch by 36 inch grid. I was looking at -- one of them was labeled inches; the other one was labeled feet.

THE WITNESS: I apologize.

JUDGE STEINBERG: And I was looking at the wrong

one.

Have we gotten to that yet? If you are going to cover that later, then I will be quiet. If not, then let's explain what they are.

THE WITNESS: Okay. There is a reason I tried to show that. These are very small units. I labeled them to make it clear to everyone in this room that it was not a 10-foot dish or 12-foot dish, as Mr. Gaghan has testified; that it never has been a 10-foot dish. That dish that's there could never be used for transmission purposes period, which I why I brought this in and showed it to Your Honor.

BY MR. NAFTALIN:

Q Mr. Turro, the things you have labeled as 18 inch by 36 inch grid on Chart No. 2, and you have two of them facing each other, do those represent the antennas that carry the microwave?

A Yes, and they are represented here on the top also.

Q I see. Okay. So you duplicated them in red?

A Yes.

Q Okay, thank you.

A Okay. So if someone were to come along and say, "Hey, listen, I'm going to jam this microwave unit," what's the first thing they are going to strip away? What's the weakest component of this system?

It's the data path. It takes a half-lane highway. So if someone comes along and starts jamming this, the first thing they are going to do is strip away the data, and the first thing the translator in Fort Lee is going to do is fall back on its own audio, the microwave.

Q And why is the data path, as you say, the weakest part?

A Well, because you've got eight lanes of audio, so it's a little more robust, and you've got a half lane of data, so it's not as robust. So if someone started jamming the thing and started turning the power up real slowly, the first thing it would interrupt would be the data.

Q Meaning because it's a much narrower path?

A Yes, and it's fragile and it's on the edge of the microwave. It's on the last highway way out.

JUDGE STEINBERG: Why don't you explain what you mean by "fall back upon itself."

THE WITNESS: Okay. Basically, if you lose data, you are translating to Pomona, Your Honor, and it's picking up Pomona. It's doing its thing. it's doing fine. And someone comes along and takes away this data path, however they do it, jamming it, for instance, they take away the data pack, the unit there is programmed in Fort Lee, Your Honor, to take in the microwave audio.

And the reason this was done was in case there was

a failure here.

JUDGE STEINBERG: Failure in Dumont?

THE WITNESS: In Dumont, and I couldn't switch it and there was an emergency, pull the plug out of the remote control. Send it to failure, stop generating the data, go to microwave audio.

JUDGE STEINBERG: I'm not sure that that's clear to me.

THE WITNESS: Okay.

MR. NAFTALIN: Let me try this again.

BY MR. NAFTALIN:

Q Mr. Turro, let's say there is some kind of disaster has struck the area.

A Yes.

Q And you rush -- and lines are cut and for whatever reason you feel it necessary to get emergency messages over the air from the Fort Lee translator.

A And the remote control unit is not working.

Q Let me -- stick with me for a minute, okay?

Exactly, and you go to your on-air studio to provide vital information of some kind.

A Yes.

Q And you find that the control unit, some spilled coffee on it or whatever, the buttons are stuck and you can't switch over to the microwave because of some stupid